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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/501,622	02/09/2000	Randell L. Mills	8ac4-D2	4146
20736	7590	12/14/2007	EXAMINER	
MANELLI DENISON & SELTER			KALAFUT, STEPHEN J	
2000 M STREET NW SUITE 700				
WASHINGTON, DC 20036-3307			ART UNIT	PAPER NUMBER
			1795	
			MAIL DATE	DELIVERY MODE
			12/14/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/501,622	MILLS, RANDELL L.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Stephen J. Kalafut	1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 30 October 2007.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-266 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-266 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>30 Oct 2007</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____.

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 30 October 2007 has been entered.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-266, for reasons of record previously applied to claims 1-265, are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. See paper no. 4, pages 2-4.

Claims 1-266, for reasons of record previously applied to claims 1-265, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. See paper no. 4, pages 4-9.

Applicant's arguments filed 30 October 2007 have been fully considered but they are not persuasive.

Regarding applicant's argument that the microwave-field Balmer line broadening in the Luque *et al.* paper being allegedly six orders of magnitude too low to account for that reported by applicant, see the attached Appendix, pages 14-15.

Applicant argues that the arguments by the "Committee" concerning the difference in profile shapes in figures 4a, 4b and 4c of Cvetanovic *et al.* are without merit. Applicant states that he as computer-fit the data himself, which fits a Gaussian profile corresponding to Doppler broadening. This is not persuasive because the difference in profile shape is apparent to the naked eye, and needs no computer fitting. Also see the attached Appendix, pages 9-12.

Applicant repeats his argument that Lieb disproves Krieg. Lieb does not reject the Heisenberg uncertainty principle entirely, but instead differs with an argument that is often based thereon. See page 555, left column, first two paragraphs. He states that "Eq. (4)" (which is on page 554), from the Heisenberg uncertainty principle, is correct, but "it is a pale reflection of the power of the operator  $-\Delta$  to prevent collapse" (page 555, left column 4<sup>th</sup> paragraph). Lieb then offers the Sobolev inequality as a "better uncertainty principle". Nowhere, however, does Lieb ever allow for hydrogen atoms going below the conventionally known "ground state".

Applicant argues that one skilled in the art need only compare the equations in his theory with those of Rathke's paper to determine if the sign of the classical wave equation is correctly presented. It is initially pointed out that while a previous action may have implied that Rathke's paper was unavailable, it was actually the articles cited by Rathke that were not available, rather than Rathke's paper itself. Any confusion on this matter is regretted. However, one of the articles by applicant, from *Int. J. Hydrogen Energy*, "The grand unification theory of classical quantum mechanics", has become available due to being included in the IDS of 30 October

2007, thus allowing a comparison to be made. In both Rathke and applicant's article, the sign between the first character, an upside-down Greek upper case delta ( $\Delta$ ), and the expression  $1/\nu^2$   $\delta^2/\delta t^2$ , in the classical wave equation, is minus. There is thus no evidence whatsoever that Rathke committed fraud by changing a sign. Applicant's allegation that the "Committee" is complicit in perpetrating the alleged fraud is completely without merit.

Likewise, Barth mentions the classical wave equation, but does not reproduce the equation in his article. This equation does not include any term for the coulomb force between the electron and the atomic nucleus to which it is bound.

Applicant argues that the "Committee's" argument regarding "q = 9 when p = 3" is not correct, since in the transition step 54.4 eV is transferred to the catalyst and the other 54.4 eV is emitted as a photon. Applicant appears to misunderstand the "Committee's" argument. From applicant's own formula, values of q are calculated from  $p^2$ . The square of 3 is 9, thus giving the value of q. This is not the calculation of a transition, but of the energy level of a particular value of p. Regarding the "hypothetical change of energy of q = 5" occurring when "p changes from 2 to 3", this is  $3^2 - 2^2$  equaling 9 - 4, which gives 5. Even assuming that part of the energy is transferred to a catalyst, the overall change is q = 5.

Applicant's newly submitted attachments 115 and 116 would fall into category (5), as set out in paper no. 20050103, because they speculate hydrino formation as an explanation for data not necessarily caused thereby.

Applicant's newly submitted attachments identified with letters, on pages 31-34 of the IDS of 30 October 2007, do not deal with the scientific merits of the present claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Kalafut whose telephone number is 571-272-1286. The examiner can normally be reached on Mon-Fri 8:00 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

sjk



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